## REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application. Claims 1-27 are pending in this application. Claims 1 and 8 are amended such that the graphical user interface is expressly included within the body of the claims. No claims are canceled. No new claims are added.

### Rejections under 35 USC § 103(a)

The Patent Office rejected claims 1-25 and 27 under 35 USC § 103(a) as being unpatentable over U.S. Patent No. 5,808,601 to Leah et al. (hereinafter "Leah") in view of U.S. Patent No. 6,894,678 to Rosenberg et al (hereinafter "Rosenberg"). The Applicant respectfully disagrees.

**Claim 1** recites a method comprising in a graphical user interface:

- determining an offset value between a selected object's position and an input position; and
- dynamically and gradually reducing the offset value by correctively adjusting the input position with respect to the object's position in proportion to a movement of the selected object.

Neither Leah nor Rosenberg, alone or in combination, teach or suggest these features.

Beginning at page 2 of the subject Applicant, problems with tradition techniques for interaction with a GUI are described. When a GUI object is selected in a conventional touch screen GUI environment, the position of the pointing device, e.g., stylus, fingertip, etc. may not always be at or near the center or other preferred "grab point" of the selected object. For example, a user may select a slider portion of a modeled sliding control know at a corner

or along an edge. Nevertheless, many conventional GUI environments model this unnatural capability, while others try to automatically correct the situation. Thus, for example, in some cases, an offset between the user input position and the GUI object is determined and then maintained throughout the movement/activation process. In other cases, the GUI object (e.g., the slider know) is immediately relocated within the GUI environment in such a manner that it is "correctly" positioned in accord with the user's input.

The Office first asserts Leah for "determining an offset value between a selected object's position and an input position; and dynamically and gradually reducing the offset value by correctively adjusting the input positioned with respect to the object's positions (fig 1, 2c, col. 6, lines 16-44)". *See Office Action Dated November 16, 2005, Page 2.* The Applicant respectfully disagrees. Leah, however, discloses a technique for *selecting* a *non-moving* visual object on a graphical user interface (GUI) (i.e., a screen). Leah does not disclose a technique that can be used with already *selected* objects. Likewise, Leah does not disclose a method that depends on *movement* of the object.

Specifically, Leah discloses a technique for widening the boundary around a visual object on a screen for purposes of making selection of the object easier—since the "selectable" or "clickable" object becomes bigger than the visual object. This greater footprint around an object on a GUI makes the object an easier target for selection by a pointing arrow of a mouse than an unadulterated object. Further, once a selection agent, such as the pointing arrow of a mouse, is inside the expanded boundary, the Leah technique

instantly gravitates the selection agent (such as the mouse pointing arrow) to the center of the visual object. Hence, the Leah technique aims to make it easier to select an object.

Claim 1, on the other hand, in a first distinction from Leah, recites that an object that has already been *selected* (e.g., clicked on once by a mouse; or selected by touching the object, in a touch pad system). In a further distinction from Leah, the method of Applicant's claim 1 performs when the object is *moving*. These arguments are repeated and it is still respectfully submitted that the Office has not taught or suggested where these claimed features are met in Leah, and therefore clarification is respectfully requested.

The Office correctly asserts that "Leah et al. fails to teach in proportion to a movement of the selected object". *See Office Action Dated November 16, 2005, Page 2.* To correct this defect, the Applicant believes that the Office asserts Rosenberg, e.g., there is in all probability a typographical error on page 2 of the Office Action where it is admitted that Rosenberg also fails to teach a proportion. The Office Asserts the following portion of Rosenberg for such teaching, which is excerpted as follows for the sake of convenience:

> FIG. 14 is a flow diagram illustrating another embodiment **650** for providing an enhanced degree of cursor control without distorting force feedback. In this embodiment, force detents are provided in a region around the cursor when the user is believed to need to finely position the cursor.
>
> The process begins at **652**. In step **654,** the mouse position in the local frame **30** is read by the local microprocessor **130** and is the reference position. In step **656,** the process examines the previous positions of the mouse to determine the velocity of the mouse. This is similar to the procedure that the ballistics steps in FIGS. 6 and 8 and step **606** of FIG. 12 perform to determine velocity.

In step **658**, the process determines whether the mouse velocity is less than a threshold velocity, and whether the mouse has been under the threshold velocity for greater than a predetermined time period. The threshold velocity is preferably some small velocity below which the user typically desires to finely position the cursor in the graphical environment. The predetermined time period is preferably a time period found to typically pass when the user is having trouble acquiring a target or performing some other fine positioning task (and which can depend on the task). For example, a time period of 3 seconds for a particular task might be used. In an alternative embodiment, only the velocity of the mouse is checked in step **658** and the time period is ignored.

If the mouse velocity is above the threshold velocity or is not under the threshold velocity for the minimum time, the process returns to step **654** (of course, forces caused by other interactions of the cursor in the GUI or other events can be output as described above). If the mouse velocity is less than the threshold velocity for the minimum time, then the process continues to step **660**, where a field of multiple force detents are provided in a determined spacing over a determined area or region. Thus, the detents are not provided if the mouse is moving over the threshold velocity, since they would only encumber fast, coarse motion of the mouse and cursor. However, if the user is moving the mouse slowly for the predetermined time period, the local processor assumes that the user needs assistance in fine positioning, and provided the field of force detents. The detents are preferably similar to the detents described with reference to FIG. 13, and output forces to slow quick motion of the mouse and cursor. The force detents can be provided in a rectangular grid, a series of circular radii, or in other configurations. These configurations can be predetermined, selected by the user, or may vary depending on the nearest region or object in the GUI. The field of detents can cover the entire screen or display frame, or may be provided only in a predefined smaller region surrounding the cursor in a predetermined shape or a shape that differs according to the region or nearest object of the GUI. In addition, large detents or small detents can be provided, and the spacing of the detents from each other can be varied as desired. For example, a grid of detents can be provided that corresponds to a grid of snap points displayed on the screen by a drawing program. In a word processor, the detents can correspond to letter spacing and line spacing of the current document. Each detent can also correspond to each pixel displayed on the screen. Ideally, the detents are spaced at the minimum resolution required for a give positioning task. For example, sensors **62** on the mouse **12** can track 1000 points per square inch. This high resolution is not required for the host computer, since, for example, 300 pixels are displayed per square inch (300 dpi). Thus, detents need only be provided at the 300 per

> square inch resolution. For some tasks, detent spacing greater than the pixel spacing can be provided.
>
> The local microprocessor can provide the detent field entirely independently from the host computer. Alternatively, the host computer can send high level commands to enable the force detent feature and to characterize the detent spacing, force intensity, and other parameters of the detents (thus allowing the user to enable and/or characterize detents if desired).

Thus, as shown in the above excerpted portion, Rosenberg merely describes the movement of a mouse and force feedback that is output in relation to movement **of the mouse**. Thus, in neither this section nor elsewhere in Rosenberg can teaching or suggestion be found for reducing an offset value within a graphical user interface. Rather, Rosenberg describes movement of a mouse and force feedback based on that movement.

It is also respectfully submitted that the Office has misinterpreted the features of Claim 1. For example, the motivation provided by the Office for the combination asserts that it "would have been obvious to an artisan at the time of the invention to include Rosenberg's teaching with method of Leah in order to reduce user's undesired experience of any hard, physical stops when the mouse reaches a physical limit". *See Office Action Dated November 17, Page 2.* It is unclear how such motivation could be used to arrive at the recited features of Claim 1 and further supports that even if the combination could be made (which the Applicant respectfully submits that it cannot), that such a combination would not teach or suggest the claimed features.

Hence, Applicant's claim 1 and the Leah technique can be considered mutually exclusive on two different counts. First, the Leah technique is for unselected objects while Applicant's method of claim 1 is for selected objects. Second, the Leah reference applies the Leah technique to unmoving objects. Applicant's method of claim 1, on the other hand, comes into play when the

object is moving (e.g., being moved). Rosenberg does not correct these defects, as Rosenberg is limited to actions performed outside of a graphical user interface and in no way discusses a relation between objects in the user interface itself.

Therefore, it is respectfully submitted that Claim 1 is allowable and withdrawal of the rejection is respectfully requested.

**Claims 2-7** depend either directly or indirectly from Claim 1 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in Claim 1, are neither shown nor suggested in the references of record, either singly or in combination with one another.

**Independent Claims 8, 10, 16** and **23** are allowable for at least the same reasons as discussed in relation to Claim 1, and therefore the Applicant will not further burden the record. **Claims 9, 11-15, 17-22, 24, 25** and **27** depend either directly or indirectly, respectively, from Claims 8, 10, 16 and 23 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in Claims 8, 10, 16 and 23, are neither shown nor suggested in the references of record, either singly or in combination with one another.

**Claim 26** was rejected under 35 U.S.C. § 103(a) as being unpatentable over Leah in view of Rosenberg in view of U.S. Patent No. 5,870,083 to Shieh (hereafter, "Shieh"). The Applicant respectfully disagrees.

Claim 26 depends from claim 20, which in turn depends from base claim 17. The features of claim 26, including the features of claims 20 and base claim 17, as previously described, are not taught or suggested by Leah and/or Shieh, alone or in combination.

Base claim 17 defines an apparatus comprising logic configured to determine an offset value between a selected object's position and an input position, and dynamically and gradually reduce the offset value by correctively adjusting the input position with respect to the object's position *in proportion to a movement of the selected object*. As previously described, Leah and Rosenberg do not teach or suggest claim 17's element of dynamically and gradually reducing the offset value in proportion to a movement of the selected object. In fact, Leah teaches away from this element of claim 17 because Leah teaches that if a visually displayed pointer of an input device crosses a perimeter boundary calculated at a distance around the outside of the object (col. 5, lines 37-47), then the visually displayed pointer immediately moves at once to the "hot or *selectable* portion of the object" (col. 5, lines 56-63) (emphases added). Shieh does not cure these defects, alone or in combination with Leah and Rosenberg.

Shieh teaches an apparatus including an input device with a touch screen, but Shieh does not teach or suggest claim 17's element of reducing the offset value in proportion to a movement of the selected object. The touch screen of Shieh does not add anything to the missing teaching (it too fails to teach or suggest the features of claim 17), hence the combination fails to produce a prima facie obviousness rejection.

Therefore, Applicant respectfully requests that the obviousness rejection be removed from claim 26 and claim 26 be allowed.

## CONCLUSION

Applicants respectfully suggest that claims 1-27 are in condition for allowance. Applicants respectfully request reconsideration and issuance of the subject application. Should any matter in this case remain unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

Respectfully Submitted,

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